

THYMELAEACEAE

A NEW SPECIES OF *GNIDIA* FROM THE KNERSVLAKTE, WESTERN CAPE, SOUTH AFRICA

Gnidia pedunculata Beyers, sp. nov., *Gnidia polycephala* (C.A.Mey.) Gilg similis sed ab ea pedunculo plerumque longo, involucralibus bracteis coriaceis abaxiale glabris, floribus quadrimeris squamis quarternis carnosus petaloideis differt.

TYPE.—Western Cape, 3118 (Vanrhynsdorp): Knersvlakte, Olifants River Settlement 316, near Eastern border, (–BC), 6-08-1993, *Le Roux & Hilton-Taylor* 27 (NBG, holo.; K, PRE).

Erect dwarf shrub up to 0.25 m tall. *Branches* ascending, later becoming woody, glabrous, densely leafy, later becoming naked with prominent leaf scars. *Leaves* alternate, ascending, densely imbricate below, becoming distant above, petiolate, glabrous; blade oblanceolate, 4.8–7.8 × 0.5–1.4 mm, subfleshy, enervate, ad- and abaxially flat, apex obtuse or subacute; petiole 0.3–0.4 mm long. *Inflorescence* terminal, indeterminate, bracteate

umbel with up to 14 mature flowers at a time; flower development sequential—fruiting stages present with young buds developing within; peduncle 10–30 mm long, glabrous. *Involucral bracts* 5 or 6, ovate or elliptic, 7–10 × 3–6 mm, green or green with maroon tinge, coriaceous, faintly nervate, adaxially shortly adpressed hairy, abaxially glabrous, apex rounded or subacute. *Flowers* subactinomorphic, yellow, strongly scented. *Pedicel* 1.3–2.0 mm long, adaxially sericeous, abaxially densely covered with short, silky, spreading hairs. *Hypanthium* 9.5–22.0 mm long, circumscissile 3.5–5.0 mm from base, upper portion narrowly funnel-shaped, covered with short crisped hairs becoming sericeous towards apex, basal portion narrowly ovate, densely covered with long, silky, ascending hairs. *Sepals* 4, narrowly elliptic, 2.9–3.6 × 1.0–2.2 mm, adaxially glabrous, abaxially sericeous, margin recurved, apex rounded. *Petaloid scales* 4, inserted at rim of hypanthium alternate to sepals, fleshy, narrowly oblong to oblong, narrowly elliptic to

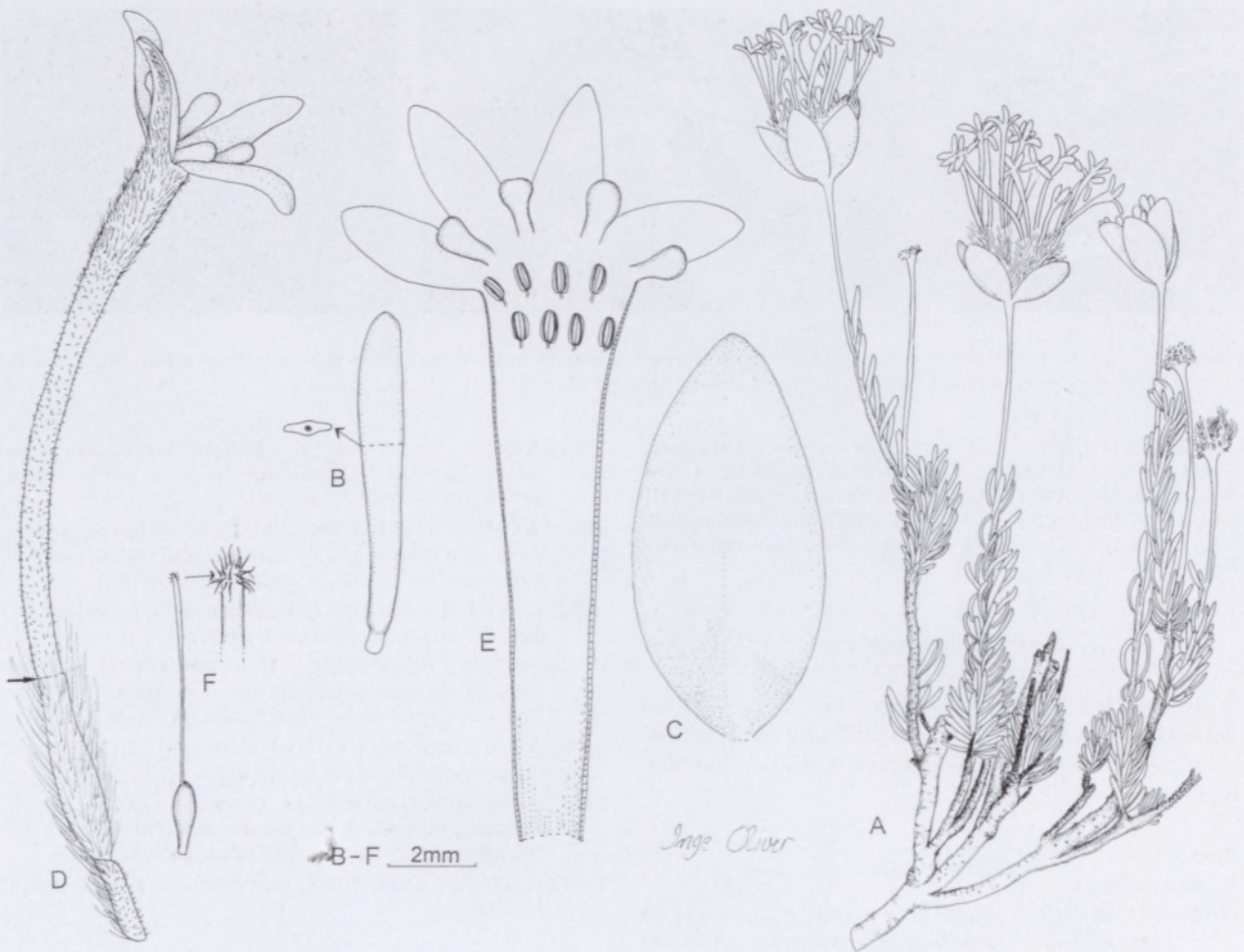


FIGURE 20.—*Gnidia pedunculata*, Le Roux & Hilton-Taylor 27 (NBG). A, portion of plant, $\times 1$; B, leaf, abaxial view and c/s; C, involucral bract, abaxial view. D, E, flower: D, side view, circumscission zone arrowed; E, l/s above circumscission zone with gynoeceum removed. F, gynoeceum and stigma enlarged. Scale bars: B–F, 2 mm.

elliptic, obovate or spatulate, $0.9\text{--}1.6 \times 0.5\text{--}0.6$ mm, apex rounded or obtuse, glabrous. *Stamens* $4 + 4$, subsessile; outer whorl semi-exserted, inserted just below rim of hypanthium; inner whorl included, inserted a short way down throat of hypanthium; filament $0.1\text{--}0.2$ mm long; anthers introrse, ellipsoid, $0.5\text{--}0.9 \times 0.3\text{--}0.5$. *Ovary* narrowly ellipsoid, attenuated at base, $1.6\text{--}3.6 \times 0.5\text{--}0.9$ mm, glabrous, unilocular with single, pendulous ovule; style filiform, inserted laterally on ovary, included, $4.8\text{--}5.0$ mm long, glabrous; stigma penicillate. *Fruit* an achene, enclosed in persistent base of hypanthium. *Flowering time*: August. Figure 20.

This species at first glance appears similar to *Gnidia polycephala* (C.A.Mey.) Gilg which also has alternate leaves, a terminal, indeterminate, bracteate umbel with involucral leaves much broader than the cauline leaves and yellow sericeous flowers. It, however, differs from *G. polycephala* by the usually well-developed peduncle, the coriaceous involucral bracts which are glabrous abaxially and the four-merous flowers with four, fleshy, petaloid scales. In *G. polycephala* there is no well-developed, naked peduncular region, the papery thin involucral bracts are adpressed hairy abaxially, the flower is pentamerous and the petaloid scales are absent.

Gnidia pedunculata has only been recorded from the Knersvlakte north of Vredendal, growing in Succulent

Karoo vegetation in well-drained, sandy, loam soil. Figure 21.

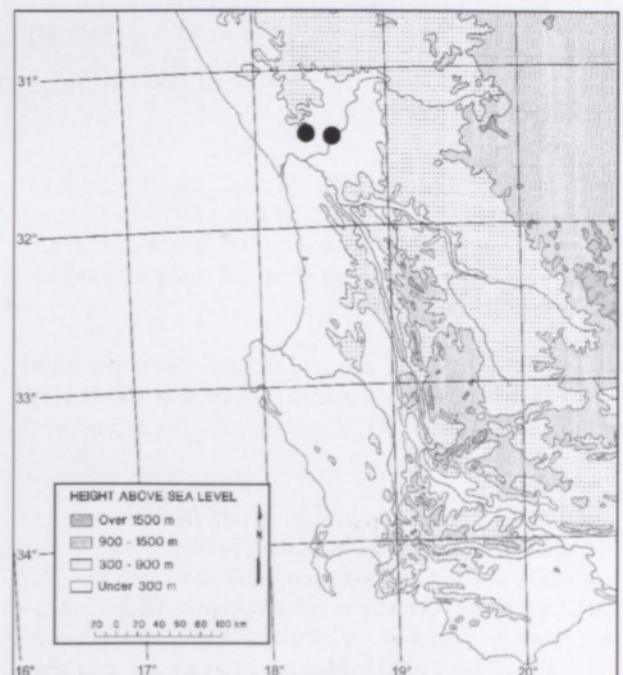


FIGURE 21.—Geographical distribution of *Gnidia pedunculata*.

The usually well-developed, naked peduncles in this species prompted the specific epithet which is derived from the Latin, *pedunculatus*.

Paratype material

WESTERN CAPE.—3118 (Vanrhynsdorp): Knersvlakte, Moedverloor, near river on steep slope, (–AD), 31-08-2001, *Schmiedel 118546* (NBG).

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